

## **Variability of diffuse interstellar bands in the spectrum of HD 188209**

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### **Abstract**

The first piece of evidence for variability of diffuse interstellar bands (DIBs) is provided: the DIB-carrier molecules form and break up in the circumstellar envelope in a very short time (days). In this case, the carrier molecules are clearly in a free state, because their formation on the hot surfaces of the grains just produced is unlikely. The phenomenon is observed only for relatively narrow DIBs, for example, at 5797 and 6614 Å. Broad (5780 and 6284 Å) DIBs show no appreciable change in intensity or profile.

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